must have at least 1 prior MDD diagnosis (ICD-9-CM: 296.2 or 296.3), but no prior diabetes (ICD-9-CM: 250.xx) or bipolar disorder (ICD-9-CM: 296.4x–296.8x) diagnosis. The non-duloxetine patients were matched to the duloxetine patients via propensity scoring (1:1 ratio), controlling for differences in demographics, comorbidities, prior opioid use, and pain levels in the 12 months pre-index period. Paired t-tests were used to compare health care utilization over the 12 months post-index period including outpatient visits, emergency department (ED) visits, hospital admissions and length of hospital stay. Chi-square tests were used to compare percentages of patients with hospitalization or ED visit. **RESULTS:** The study sample included 878 patients (duloxetine: n = 439; non-duloxetine: n = 439) with comparable baseline characteristics. Compared with duloxetine patients, non-duloxetine patients on average had 12.0 more outpatient visits (95% Confidence Interval [CI]: 6.4–17.5, $p < 0.0001$), 0.16 more hospital admissions (CI: 0.07–0.26, $p = 0.001$), and 0.79 more hospital days (CI: 0.17–1.41, $p = 0.013$). Additionally, a higher percentage of non-duloxetine patients was hospitalized (17.8% vs. 10.9%, $p = 0.004$). No group difference was found in ED visits. **CONCLUSIONS:** Controlling for cross-cohort differences, VA patients who were treated with duloxetine were found to be associated with lower health care utilization than those treated with other antidepressants.

PMH30

A DYNAMIC MARKOV APPROACH ASSESSING THE BURDEN OF ILLNESS OF GENERALIZED ANXIETY (GAD) DISORDER IN CANADA

Bereza BG[1], Machado M[1], Papadimitropoulos M[2], Sproule B[3], Ravindran AV[3], Einarson TR[1]
[1]University of Toronto, Toronto, ON, Canada, [2]Eli Lilly & Company, Toronto, ON, Canada, [3]Centre for Addiction and Mental Health and University of Toronto, Toronto, ON, Canada

OBJECTIVES: GAD is a chronic disease with waxing and waning of symptoms; exerting substantial economic and humanistic impact. To date, economic evaluations have been limited to time horizons of <12 months. This study develops a dynamic decision model, quantifying the lifetime cost-of-illness (COI) for GAD (direct and indirect costs). **METHODS:** TreeAge® software was used to develop an incidence-based Markov model with 9 health-states (6-month cycles): Family physician assessment (initial), Specialist assessment for 2nd and 3rd line therapies, Maintenance therapies, Treatment discontinued and Death (absorbing). Patients seeking treatment enter the model between the ages of 18–80 and subject to age of onset. Pharmacotherapy based on Canadian Psychiatric Association (CPA) guidelines; revised and validated by an expert panel. Meta-analysis of CPA-cited evidence populated remission and response rates. Published literature determined absenteeism, treatment discontinuation, onset of illness, and relapse rates. Physician, pharmacotherapy, hospitalization costs based on published public (Province of Ontario) rates. All cause mortality (2000–2002) and hourly wage rates (2008) published by Statistics Canada. COI was reported in 2008 Canadian dollars, discounted at 5%. A total of 10,000 iterations were used for 1st order micro-simulation. **RESULTS:** Mean lifetime COI/patient = $6671 (SD = $4678). Mean age of onset = 48 years. Mean (SD) tracker values: Relapse/patient = 1(1.02); Treatment resistant patients = 20%(40%); Discontinued treatment time = 13(8) years. Absorbing state (Death) captures 89% of patients. The range of uncertainty for relapse (1–5%) and cost of absenteeism ($0-$6,071) exerted the highest impact of all variables on mean COI $5,000–8,000 and $1,000–$12,000 respectively. Breakdown cost analysis: 82% absenteeism, 8% pharmacotherapy, 7% physician, 2% hospitalization. 85% of all patients discontinued treatment by 4th year). **CONCLUSIONS:** This is the first known study to model the course of GAD over a patient's lifetime and quantify COI. Absenteeism contributes substantially to the COI for GAD. Relatively low attribution of pharmacotherapy cost to COI possibly due to treatment discontinuation.

PMH31

MEASURING THE ECONOMIC BURDEN OF DEPRESSION USING PATIENT RECORDS

Jacobs P[1], Ohinmaa A[2], Escober-Doran C[1], Patterson S[3], Slomp M[3]
[1]Institute of Health Economics, Edmonton, AB, Canada, [2]University of Alberta, Edmonton, AB, Canada, [3]Alberta Health Services, Edmonton, AB, Canada

OBJECTIVES: To measure the total direct cost of depression and its distribution to different services using administrative databases from Alberta service providers. **METHODS:** We analyzed available administrative databases from Alberta Health and Wellness and the Alberta Mental Health Board from 2005–2006. The following cost information was obtained: psychiatric care, community mental health visits, regional inpatient and outpatient services, emergency room visits, and physician visits. Records were selected if the primary diagnosis for the service was depression disorder using 2006 dollar values. Data was analyzed by age group. **RESULTS:** Depression in Alberta had a direct health care cost of $97 M in 2005–2006, representing 1.1% of the province's total health care costs. The treated prevalence of depression in 2005–2006 was estimated at 13%. The greatest cost driver was physician services ($42.6 M), followed by acute inpatient costs ($33.8 M). General practitioners incurred half of physician costs and treated nearly six times the number of individuals with depression than psychiatrists. Per capita cost to treat depression increases with age, with seniors representing the highest cost per individual. Older adults tend to use and incur a greater cost in inpatient services, while outpatient or physician services are more heavily used by younger age groups. **CONCLUSIONS:** The estimated $97 M cost of depression in Alberta is likely to be an underestimation. We included individual data with a primary diagnosis of depression and could not include drug data or privately funded services. Our findings are consistent with previous research that people with depression are treated more frequently in primary care and that the cost to treat depression increases with age. Depression continues to be a heavy cost burden throughout Alberta and worldwide.

PMH32

COST OF SCHIZOPHRENIA IN FRANCE

Heider D[1], Angermeyer MC[2], Millier A[3], Konig HH[4], Azorin JM[5], Toumi M[6]
[1]Universität Leipzig, Leipzig, Germany, [2]University of Leipzig, Leipzig, Saxony, Germany, [3]CREATIV-CEUTICAL, Paris, France, [4]University of Leipzig, Leipzig, Germany, [5]SHU de Psychiatrie d'Adultes, MARSEILLES, France, [6]University Claude Bernard Lyon I, Villeurbanne Cedex, France

OBJECTIVES: The main objective is to assess resource utilization and cost of schizophrenia as well as cost drivers using a prospective cohort that followed a representative sample of 288 French patients. **METHODS:** This study is the first comprehensive prospective study on cost of schizophrenia. Patients were randomly selected from three defined catchment areas located in the North, Centre and South of France. Unit costs were based on the most valid available data, mainly health insurance and French public sources. Costs were defined based on society perspective. Direct cost included treatment provided in inpatient services, intermediate facilities, outpatient visits and medication costs. Indirect costs were considered as productivity loss for unemployed or sick leave patients in working age. **RESULTS:** Average patient direct costs yield €3534, break down as 39.3% for inpatient treatment, 37.7% for day clinic, and 16.1% for medication. The remaining includes visits to psychiatrists, GP's, psychologists and other physicians. Assuming 1% prevalence of schizophrenia, the estimation of annual direct costs yields €1, 581, 111, 600, and indirect cost of schizophrenia linked to productivity loss in France yields €2, 214, 488, 006. Several cost drivers were identified: relapse during the follow-up period, positive symptoms of schizophrenia, and depressive symptoms at baseline predict higher costs, while satisfaction with their health or negative symptoms of schizophrenia at baseline was linked with lower costs. **CONCLUSIONS:** This study highlights the heavy societal burden of schizophrenia in France, of which hospitalization (day and full time) services account for 77%. Any attempt to anticipate and prevent hospitalization might have significant effect on the cost of schizophrenia. Such intervention is likely to be cost effective.

PMH33

BURDEN OF BIPOLAR DISORDER: WHAT ARE WE REALLY MEASURING?

Gil E[1], Medina E[1], Cordero L[2], Valero G[1], Rovirosa A[1]
[1]AstraZeneca Farmacéutica Spain S.A., Madrid, Spain, [2]AstraZeneca Farmacéutica Spain S.A, Madrid, Spain

OBJECTIVES: Bipolar disorder (BD) is a long-term condition that has a high impact on patients, families, health care systems and society. One of the main challenges in mental health is to determine the burden associated with it. The purpose is to establish the different perspectives and measures used to asses the burden of BD. **METHODS:** A systematic review was performed to identify studies in PUBMED, MEDLINE, EMBASE and Cochrane library. The search strategy used the MeSH terms: "bipolar disorder" & "cost of illness", combined with "burden of disease", "disease burden" & "burden of illness". There weren't constrains on date or language. Titles and abstracts were examined by reviewers, selecting for inclusion articles reporting an explicit aim to evaluate the burden of BD, measured by prevalence, morbidities associated, lost of quality of life, disabilities, impairments and/or costs. Articles were classified into 4 categories, depending on focus studied: 1) patients; 2) caregivers (family, partners); 3) health care-system; and 4) society. **RESULTS:** A total of 188 articles were identified, 32 met study criteria. Eleven studies were reviews, and 21 were manuscripts, classified as 53.1% caregivers (n = 17), 28.2% health care-system (n = 10), 15.6% patients (n = 5) and 3.1% society (n = 1). The main outcome measures were: distress and subjective burden in caregivers scope, costs in health care-system, morbidity in patients and a set of all (prevalence, patient-related issued, disabilities and costs) in society. **CONCLUSIONS:** Concept of burden of disease varies depending on the studies perspectives and researchers concern. Our study suggests that the main interest when evaluating the burden of BD is focused on assessing the impact of the disease on relatives. As BD causes a high level of impairments and disabilities, that affects specially to caregivers, costs associated with it are difficult to estimate. Additional research is needed in order to determine them properly.

PMH34

COSTS OF SCHIZOPHRENIA WITHIN A LARGE GERMAN STATUTORY HEALTH INSURANCE FUND

Zeidler J[1], Mittendorf T[2], Greiner W[3]
[1]Leibniz University of Hannover, Hannover, Germany, [2]Herescon gmbh, Hannover, Germany, [3]University of Bielefeld, Bielefeld, Germany

OBJECTIVES: Data concerning costs of illness in patients with schizophrenia are scarce in Germany. Aim of this claims data analysis was to examine the costs of schizophrenia from the perspective of a major statutory health insurance fund. **METHODS: A nation-wide database was used to evaluate the costs of schizophrenia** in 2006. All patients with schizophrenia (ICD F20) were identified via a special algorithm based on claims data. All schizophrenia related costs for outpatient care, inpatient care, medications, rehabilitation, occupational therapy, and sick leave payments were analysed. **RESULTS: Data from 11,513 patients were available, with 47%** being female (and 46 years of age). Mean costs of EUR 4,966 in the year 2006 were incurred from the health insurance perspective. A total of €2924 (59 %) were incurred by inpatient care, and €1333 (27 %) were due to medication. A total of €421 (8 %) resulted from schizophrenia related outpatient psychological specialists visits. Costs